AMENDMENTS TO THE CLAIMS

The following listing of the claims is provided in accordance with 37 C.F.R. 1.121:

1. (previously presented) A method of coating a CMC fiber, comprising:

passing said fiber through a reaction zone along a fiber path substantially parallel to a longitudinal axis of said zone,

passing a flow of fiber coating reactant though said reaction zone; and

disrupting at least a portion of said flow of reactant from a flow path substantially parallel to said fiber path to create a mixing flow adjacent said fiber.

2. (original) The method of claim 1, wherein said reaction zone is a CVD reactor chamber.

3. (original) The method of claim 2, wherein said fiber is passed through a first seal through said CVD reactor chamber to discharge at a second seal of said reactor chamber.

4. (original) The method of claim 1, wherein said fiber comprises a single monofilament fiber.

5. (original) The method of claim 1, wherein said fiber comprises a fiber tow.

6. (original) The method of claim 5, wherein a plurality of fiber tows are simultaneously passed through said reaction zone for coating.

7. (original) The method of claim 1, wherein said fiber is a silicon carbide fiber.

8. (original) The method of claim 1, wherein said fiber is an aluminum oxide fiber.

9. (original) The method of claim 1, wherein said fiber is a silicon carbide-based fiber.

10. (original) The method of claim 1, wherein said fiber coating reactant comprises a hydrocarbon.

11. (original) The method of claim 1, wherein said fiber coating reactant comprises methane.

12. (original) The method of claim 1, wherein said fiber coating reactant comprises boron trichloride and ammonia.

13. (original) The method of claim 1, wherein said fiber coating reactant comprises boron trichloride, ammonia and a silicon precursor.

14. (original) The method of claim 13, wherein the silicon precursor is selected from dichlorosilane, trichlorosilane, silicon tetrachloride and silane.

15 (original) The method of claim 1, wherein said fiber coating reactant includes hydrogen or nitrogen.

16. (original) The method of claim 1, wherein said reaction zone is maintained at a pressure about 0.05 Torr to about atmospheric pressure (760 Torr).

17 (original) The method of claim 1, wherein said reaction zone is maintained at a pressure about 0.1 to about 50 Torr.

18. (original) The method of claim 1, wherein said reaction zone is maintained at a pressure about 0.3 to about 10 Torr.

19 (original) The method of claim 1, wherein said reaction zone is maintained at temperature of about 700° to about 1800°C.

20. (original) The method of claim 1, wherein said reaction zone is maintained at temperature of about 1100° to about 1550°C.

21. (original) The method of claim 1, wherein said reaction zone is maintained at temperature of about 1350° to about 1500°C.

22. (original) The method of claim 1, wherein a tow of fibers is passed through the reaction zone and the tows are spaced apart about 0.020 to about 1 inch.

23. (previously presented) The method of claim 1, wherein a tow of fibers is passed through the reaction zone and the tows are spaced apart about 0.045 to about 0.25 inches.

24. (original) The method of claim 1, wherein a tow of fibers is passed through the reaction zone and the tows are spaced apart about 0.05 to about 0.1 inch.

25. (original) The method of claim 1, the fiber is passed through the reaction zone at a rate from about 1 to about 200 inches/minute.

26. (previously presented) The method of claim 1, the fiber is passed through the reaction zone at a rate from 5 to about 100 inches/minute.

27. (original) The method of claim 1, the fiber is passed through the reaction zone at a rate from about 10 to about 60 inches/minute.

28. - 39. (canceled)

40. (withdrawn) The method of claim 1, wherein disrupting comprises inducing flow of the fiber coating reactant back and forth across the fiber.

41. - 45. (canceled)

46. (previously presented) The method of claim 1, wherein disrupting comprises intermittently disrupting flow of the reactant along the flow path with a plurality of structures in the flow path.

47. (previously presented) The method of claim 46, wherein the plurality of structures comprise a disrupter face angled about 10° to about 90° from said longitudinal axis in a direction against said flow of the reactant.

48. (previously presented) The method of claim 46, wherein the plurality of structures comprise a disrupter face angled about 15° to about 50° from said longitudinal axis in a direction against said flow of the reactant.

49. (previously presented) The method of claim 46, wherein the plurality of structures comprise a forward angled face and a following angled face.

50. (previously presented) The method of claim 46, wherein intermittently disrupting comprises alternatingly disrupting flow of the reactant from opposite sides of the flow path and the fiber path.

51. (previously presented) The method of claim 1, wherein disrupting comprises mechanically inducing a turbulent flow of the reactant.

52. (previously presented) The method of claim 1, wherein disrupting comprises structurally convoluting the flow path.

53. (previously presented) The method of claim 1, wherein passing the flow comprises introducing the fiber coating reactant at a plurality of positions along the flow.

54. (previously presented) The method of claim 53, wherein introducing comprises alternatingly introducing the fiber coating reactant from opposite sides of the flow path and the fiber path.

55. (withdrawn-currently amended) A method of coating a CMC fiber, comprising:

flowing a fiber coating reactant in a first direction against a continuous fiber passing through a reaction zone in a second direction, wherein the first and second direction are different from one another.

56. (withdrawn-currently amended) A method of coating a CMC fiber, comprising:

intermittently disrupting flow of a fiber coating reactant against a continuous fiber passing through a reaction zone.